

## REMARKS

The Examiner is thanked for the careful examination of the application. However, in view of the foregoing amendments and the remarks that follow, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

### Restriction:

In response to making the restriction requirement final, the non-elected claims 13-21 have been canceled.

### Claim Objection:

In response to the claim objection and the recommendation of the Examiner, claim 7 has been amended so that it now depend from claim 6.

### Art Rejections:

Claims 1, 2, 6-8 and 12 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,766,056, hereinafter *Huang*. One of the objects of the present invention is to provide an efficient method for determining whether or not an image has a specified pattern. In one embodiment, the present invention is used for determining whether or not paper money is being duplicated. In order to speed up and simplify the process, the number of pixels considered at any one time is reduced. However, in view of the fact that the image being processed, e.g., money, may fade or discolor after time, a reasonable number of pixels should be considered in order to increase accuracy. See, for example, the first full paragraph on page 14 of the specification.

In one embodiment, the present invention achieves these goals by selecting certain pixels to be considered when binarizing a target pixel. Specifically, as can be

seen in Figures 5 and 6, a target pixel and pixels specifying conditions are illustrated. Only the target pixel and other related pixels satisfying certain conditions are used as the basis for the color data when binarizing the target pixel.

In order to minimize the number of related pixels selected, the present invention includes a storage unit for storing a first condition that defines absolute positions of pixels in the image and a second condition on positions of pixels relative to a target pixel. In the specification, the term "absolute position" is defined as a position of the pixel with respect to an edge of the image. In other words, the position is absolute or fixed with respect to the entire image, as opposed to fixed with respect to a target pixel.

Such a condition is not taught or suggested in *Huang*. In *Hunag*, the selected pixels are all selected based on their relative position to a target pixel, not with respect to an absolute position.

Since the present invention uses two conditions, one absolute and the other relative, more variation in the pixel selection is obtainable over the prior art .

Claims 8 and 12 are similar to claim 1 in that they also define two conditions, one absolute and the other relative. Accordingly, all three independent claims 1, 8, and 12 distinguish over *Huang*.

Claims 4 and 10 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Huang* in view of U.S. Patent No. 5,434,953, hereinafter *Bloomberg*. The Examiner relies upon *Bloomberg* for its alleged teaching that a typical sub-sampling operation involves dividing an image into square blocks of pixels and then selecting your predetermined pixel from each block. However, *Bloomberg* does not overcome the deficiency of the remaining references with

regard to the rejections set forth and discussed above. Accordingly, Applicants submit that the combination is inappropriate and should be withdrawn.

Claims 3 and 9 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Huang* in view of U.S. Patent No. 5,687,252, hereinafter *Kanno*. The Examiner relies upon *Kanno* for its teaching of a number of different binarization processes that may be carried out in order to binarize image data. However, *Kanno* does not overcome the deficiency of the remaining references with regard to the rejections set forth and discussed above.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejections of claims 1-12 in view of the foregoing amendments.


To further define the protection to which applicants are entitled, new dependent claims 22-24 are submitted above. The new dependent claims further define the "absolute" term and are patentable at least for the reasons set forth above.

In the event that there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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